

**A Report of Activities at Xtobo, Yucatán, México,  
During the 2005 Field Season**

**by David S. Anderson**

The 2005 field season of Proyecto Arqueológico de Xtobo (PAX) saw the beginning of the topographic mapping of the archaeological site of Xtobo. The site is a Middle Preclassic regional center located in northwest Yucatán, México. One prior season of work at the site was carried out by PAX (Anderson 2005), and initial investigations were made by Proyecto Costa Maya (PCM) (Robles C. and Andrews 2003). The site center was originally mapped by PCM using simple tape and compass procedures (Anderson 2003, Figure 3.3), which was adequate at the time, but for the upcoming dissertation research of the author, a map with greater precision was required. In addition to the topographic mapping, surface collections of pottery were made and additional survey to locate architectural features was carried out. Efforts during the 2005 season resulted in a topographic map of the site center comparable in extent to the original PCM map, but exhibiting greater detail and a number of features not previously noted. In future field seasons the map will be extended to cover the entire 1 km<sup>2</sup> extent of the site. The pottery collections made further confirmed the dating of the site to the Middle Preclassic, and the survey recorded several new structures and *sacbeo'ob*.

As is customary for archaeological work, not everything went as planned during this field season. A total station was brought to the field for use in mapping, but upon setting the unit up for work it became apparent that it was not functioning properly, thus greatly threatening the season's productivity. Bruce H. Dahlin, director of the neighboring Proyecto Pakbeh, generously offered a theodolite and archaeology students without which mapping could not have gone forward. Another minor delay was created by a rare July hurricane, which fortunately caused no

major damage in the vicinity, or to the site, but did provide valuable personal insight into how psychologically impacting the unheralded arrival of such a storm could have been to the Maya.

Every effort has been made by the author to provide objective data on the site of Xtobo in this, and previous, reports. As an archaeologist the author feels he has an obligation to separate description from interpretation. The point being that the reader can see what the interpretations are being made on, and if they disagree can formulate their own. It has been duly noted that completely objective observation, particularly in archaeology, is a logical impossibility (D. Clark, personal communication 2005), but we still have a duty to remove, or admit to, as many of our biases as we can, in order to provide as clean a data set as possible. This way our colleagues can in turn apply their own biases as they see fit. The author has traditionally viewed maps as primarily objective raw data, but the experiences of this field season have shown that many layers of interpretation lie between the actual site of Xtobo and its representation in map form. The maps here presented are heavily simplified views of the reality of the site, but until the reader has the opportunity to visit the site they will hopefully suffice. Anyone interested in checking the maps as drawn against the points taken in the field will find the coordinates in Appendix 1.

### **Activities**

Fieldwork was carried out for six weeks in the months of June and July of 2005. Because of heavy rains, significant clearing had to be done before mapping could begin. The rains were fortuitous, however, as they allowed the author a new view of the site. The rains resulted in an expansive zone of pools of standing water the majority of which were located to the east of the

central plaza. These pools prevailed for more than a week without additional rain. A heavier rainy season could result in practical lakes lasting for months.

### ***Mapping***

The topographic mapping of Xtobo was carried out using a theodolite and metric stadia rod. Measurements of the stadia rod and the vertical and horizontal angles were recorded manually in the field, and then transferred to a Microsoft Excel™ spreadsheet in the lab. The spreadsheet was then used to transform the field measurements into three dimensional coordinates (Table 1, Appendix 1). Traditionally such coordinates are based on an arbitrary grid system set up for the particular site. In order to aid future work, UTM coordinates (Datum: WGS 1984) have also been used as a grid system for locating all data points. This was made possible by determining the precise position of the mapping base station, and using those coordinates as the basis for computing all others. The location of the base station was determined using a hand held GPS unit. In order to overcome the standard error of such a unit, coordinates were successively recorded on the base station over the course of the season until the average of these coordinates ceased to vary significantly (Table 2).

In order to draw the topographic map the coordinates were transferred into the mapping program Surfer™ (Figure 1). An examination of the map will quickly demonstrate to the reader that the author has had considerable difficulty with the Surfer™ program. The only solution that the author is currently aware of would involve massive manipulation of the data, primarily along the lines of inventing data points to correct the egregious errors. Since this procedure would require considerable time, and will immediately be rendered unnecessary when work on the map is continued, it has not been carried out to date. The representations of the structures on the

topographic map is relatively accurate, as such the author would urge the reader to look at the buildings and ignore the rest.

Topographic maps are great tools for capturing details of an archaeological site's current state of being, but they do not always capture all of the architectural details that we know were part of a site in its original form. As such the author has chose to redraw the map of Xtobo following Maler conventions for structure representation in order to provide a more informative, but slightly more biased, map. The three-dimensional coordinates obtained in making the topographic map were employed in drawing the reconstruction map to achieve the greatest possible precision in regards to structure dimensions (Figure 2).

This map also provides a more understandable place to present the structure numbering system employed at the site. Basal structures are being sequentially numbered as they are added to the map, to provide a quick count of structures mapped. Their position in the site's arbitrary grid system is recorded via quadrant designations and UTM coordinates in the structure database. Super structures are numbered in respect to their basal structures, e.g. Str. 18-1 would refer to superstructure 1, located on basal structure 18. The numbering of superstructures is based on clockwise ordering beginning in the north. Structures with more then two levels continue this pattern.

### *Surface Collections*

At the end of the 2005 field season a day was taken to make new surface collections of pottery sherds, under the guidance of Fernando Robles. Any sherd found on, or within one meter of a structure was collected and labeled as being from that structure. The sherds were subsequently identified to the group level in the type-variety system by Robles and Teresa

Ceballos Gallatreta. A combined tally of pottery sherds recovered at the site by PCM and PAX can be found in Table 3. Despite a team of five people searching for pottery sherds, only 62 identifiable sherds were recovered. This general poverty of surface collections has been previously noted (Anderson 2005; Robles C. and Andrews 2003), and it is unlikely that surface collections will be an effective means for making artifact collections in the future. The cause of this abnormality is not known, but there are many possibilities. First of all, sherds from the site's primary occupation period are over 2000 years old, more than enough time to allow the degradation of many remains. Second, the occupation of Xtobo has been observed to be dispersed (Anderson 2005), suggesting a relatively low population level, and fewer people result in fewer pottery vessels, thus fewer sherds to find today. Third, Xtobo was occupied primarily only during the Middle Preclassic, and perhaps for only a portion of that time period. This relatively short occupation period would also result in fewer sherds. Additional factors, such as the chemical composition of the soil and bioturbation, may also have impacted the survival of sherds, but have not yet been tested.

### ***Additional Survey***

On days when mapping was not possible due to equipment problems the author carried out additional exploration of the site following the recording methods used in the 2004 season. GPS coordinates and general attributes of each feature were recorded (Table 4). These features were then added to the surveyed structures database (Appendix 2). The structures in this database are those known to exist, but not yet included in the site map. Unlike the work carried out in 2004, these explorations were not made systematically, but rather they were guided by the

interests of the author. All of these structures are plotted on the survey map of the site (Figure 3).

### **Results – The Evolving Xtobo**

Xtobo is an archaeological site that has never failed to provide significant new discoveries during each field season. As such the current view of the site is much more complex and intricate than was imagined on the site's discovery. Three previously unknown *sacbeo'ob* were encountered during this season, all of which have significant functional and chronological implications. The flooding observed on the eastern side of the site provides an additional explanation for the lopsided settlement dispersal observed last season (Anderson 2005). Each new piece of information is greatly adding to our view of the site, and major excavations have yet to even begin.

#### ***Sacbeo'ob at Xtobo***

*Sacbeo'ob*, or causeways, have long been considered a standard component of Maya archaeological sites, particularly in the northern lowlands (Cobos P. and Winemiller 2001; Folan 1991). Their prevalence at Xtobo indicates that the concept of a *sacbe* was already well established in the earliest expressions of Maya culture. In order to avoid confusion in referring to the *sacbeo'ob* they have all been given names (see Figures 2 and 3). The *sacbeo'ob* of Xtobo can be divided neatly into two categories, five plaza centered examples (Sacbe Nohol, Sacbe Chaltun, Sacbe Xaman, Sacbe Chikin, Sacbe Jo'), and two peripheral examples (Gran Avenida, Sacbe Sascab). The construction techniques of these *sacbeo'ob* are consistently minimal. Four of the seven examples (Sacbe Chaltun, Sacbe Xaman, Sacbe Chikin, Sacbe Jo') consist solely of

parallel alignments of cut stones, any fill used to raise the path up from the ground level either never existed, or has been removed by natural or cultural transforms. The other three *sacbeo'ob* (Gran Avenida, Sacbe Nohol, Sacbe Sascab) were raised above ground level, but the current height of the constructions only rarely approaches half-a-meter.

Each of the plaza centered *sacbeo'ob* directly connect the plaza with neighboring architectural groups. These *sacbeo'ob* have an obvious functional role in facilitating interaction between these architectural groups. The act of their construction implies the existence of social relationships between the activities carried out at each group. Although the functions of the architectural groups linked to the plaza by these *sacbeo'ob* have not yet been documented, there is enough variation in their forms to posit different functions. Strs. 15 and 16 were most likely elite residences based on the scale and arrangement of their architecture, and the presence of several metates. Str. 18 could similarly have been an elite residence, but it is much smaller in extent and has only one metate. Str. 14 is a simple pyramid with no elaborations, thus only a generic civic and/or ceremonial role can be suggested. Str. 11 is a double triadic group, a structure type which has been linked to ceremonial functions (see Carlson 1981; Hansen 1998; Valdés and Fahsen 1995).

The two peripheral *sacbeo'ob* are not so obvious in their roles. The Gran Avenida was encountered during the 2004 field season, and at this time it was suggested that it served as an entrance leading from the site's periphery towards the site center (Anderson 2005). This role is still possible, but the positioning of the newly discovered peripheral *sacbe* complicates the situation. Sacbe Sascab runs from the distal end of the Gran Avenida north northeast to an architectural group originally labeled as the separate site of Xtobo 2 (Robles C. and Andrews 2003). Although it is still a preliminary inference, the Xtobo 2 group appears to have been a

center for the processing of *sascab* mined from a nearby *sascabera* (Anderson 2005). The path of this *sacbe* essentially runs parallel to the site's northwest periphery. The primary enigma surrounding *Sacbe* Sascab is this orientation. It is not certain why it runs along the site's edge rather than into the site center, or any other populated region of the site. The name *Sacbe* Sascab gives away the poorly supported assumption that this *sacbe* was used to transport sascab from the Xtobo 2 region to the site center, but many other possibilities will have to be examined. One other possibility is that if S. Sascab continued to the north northeast it would arrive at the neighboring site of Kintunich after a few hundred meters. Until the peripheral *sacbeo'ob* are properly mapped, and test excavations carried out in the region these enigmas will have to remain as such.

### ***Annex Architecture***

Two examples of annex type architecture were noted during the mapping, Strs. 12 and 17. Each structure is physically connected to larger structures, but of notably inferior architectural quality than those structures. They also both include metates and are located in what appear to be inconspicuous locations. From these basic facts it is easy to jump to the conclusion that they represent food preparation, or staging areas, where lower status individuals were working for higher status individuals who were utilizing the larger structures, but much more work will have to be done to support such an idea.

The first example of this architectural type noted was Str. 12, which is connected to Str. 11, the double triadic group. An extant alignment of stones suggests the two structures were connected via a short walkway, ca. 1 meter wide and 3-4 meters long. Str. 12 itself appears to have been constructed entirely of *chiich*, of small gravel. The margins of the structure are

primarily apparent due to distinct changes in altitude. One large metate is associated with the structure.

Str. 17 was identified when metates, which at the time were thought to be located off the northwest corner of Str. 16, were being cleared of vegetation by the workers. Arseño Pech Noh noted the margins of a very low mound, after clearing the area, the presence of the structure was clear despite very poor preservation. The southern edge of the structure presents the clearest evidence of construction, while the northern edge is barely visible. So far 6 metates have been found in association with this structure. At this point there are notable differences in the assumed functions of the main structures that the annex structures are associated with, but with the mapping of the site still incomplete it is too soon to draw any final conclusions.

### *Refinements of the dating*

Although relatively few pottery sherds were recovered during field work, what was recovered further confirmed the Middle Preclassic as the primary, if not exclusive, occupation of Xtobo. The original type-variety analysis of the pottery collected by PCM at the site suggested that 81% of the pottery could belong to the Early Nabanche Middle Preclassic horizon. The additional collections made during the 2005 season have raised that figure to 83% of the pottery collection. Some of the pottery groups included in this estimate have also been known to continue to be used in the Late Nabanche horizon of the Late Preclassic period; however the groups Ucu, Dzudzuquil, and Joventud, which are exclusive to the Early Nabanche horizon, make up 84% of the Middle Preclassic pottery. Furthermore, only 9 sherds (or 3% of the identifiable pottery) belong to groups associated solely with the Late Nabanche horizon. Thus,

the new pottery collections from the site continue to strongly suggest that Xtobo's primary period of occupation was during the Middle Preclassic period.

The newly discovered *sacbeo'ob* also greatly help to support the dating of Xtobo's architectural center. Almost all significant architectural groups located near the plaza have now been shown to be connected to it via *sacbeo'ob*. This strongly implies contemporary occupation for all of these structures. Additionally, other structures in the vicinity of the plaza can be seen as oriented towards the plaza (*e.g.* Str. 19 and Survey Str. S-117). The lack of structures with conflicting orientations suggests that at least the center of Xtobo saw only one significant period of occupation. When combined with the ceramic data it strengthens the implication that the site was occupied in the Middle Preclassic, and subsequently abandoned.

### ***Flooding at Xtobo***

The observation of extensive flooding at Xtobo has many possible significances. The regions seen to be prone to flooding, primarily the region to the east and northeast of the site center, as well as the gap between the sites of Xtobo and Kintunich, have already been noted to be lacking in architectural remains (Anderson 2005), thus opening the possibility that the areas were prone to flooding in the Middle Preclassic as well. Curtis et al. (1996) identified a period of increased rainfall at 254 BC, roughly equivalent to when Xtobo was abandoned, thus it is possible that flooding played a role in the decision to abandon the site.

It has been noted that water sources in the vicinity of the site are extremely scant (Anderson 2005), particularly in comparison with the Late Preclassic site of Komchén (E.W. Andrews V, personal communication 2005). Although one new ground water well was discovered this season, the site still has to be considered a very dry place. The abundant flood

waters could have been used as an alternative water source. The quality of the water today is abysmal, but this is due primarily to the free-range cattle inhabiting the area. Clean catchment basins could have easily been maintained by the Preclassic Maya, and used to provide a significant water source.

During public discussions of this new data from Xtobo, the author has frequently been asked if there is any correlation between these zones of flooding and the *sacbeo'ob*. The simple answer is no. The flood zones are largely devoid of any form of architecture. It is also worth reiterating that the *sacbeo'ob* at Xtobo are very low, and generally would not suffice to carry anyone over anything but the most minimal of flooding.

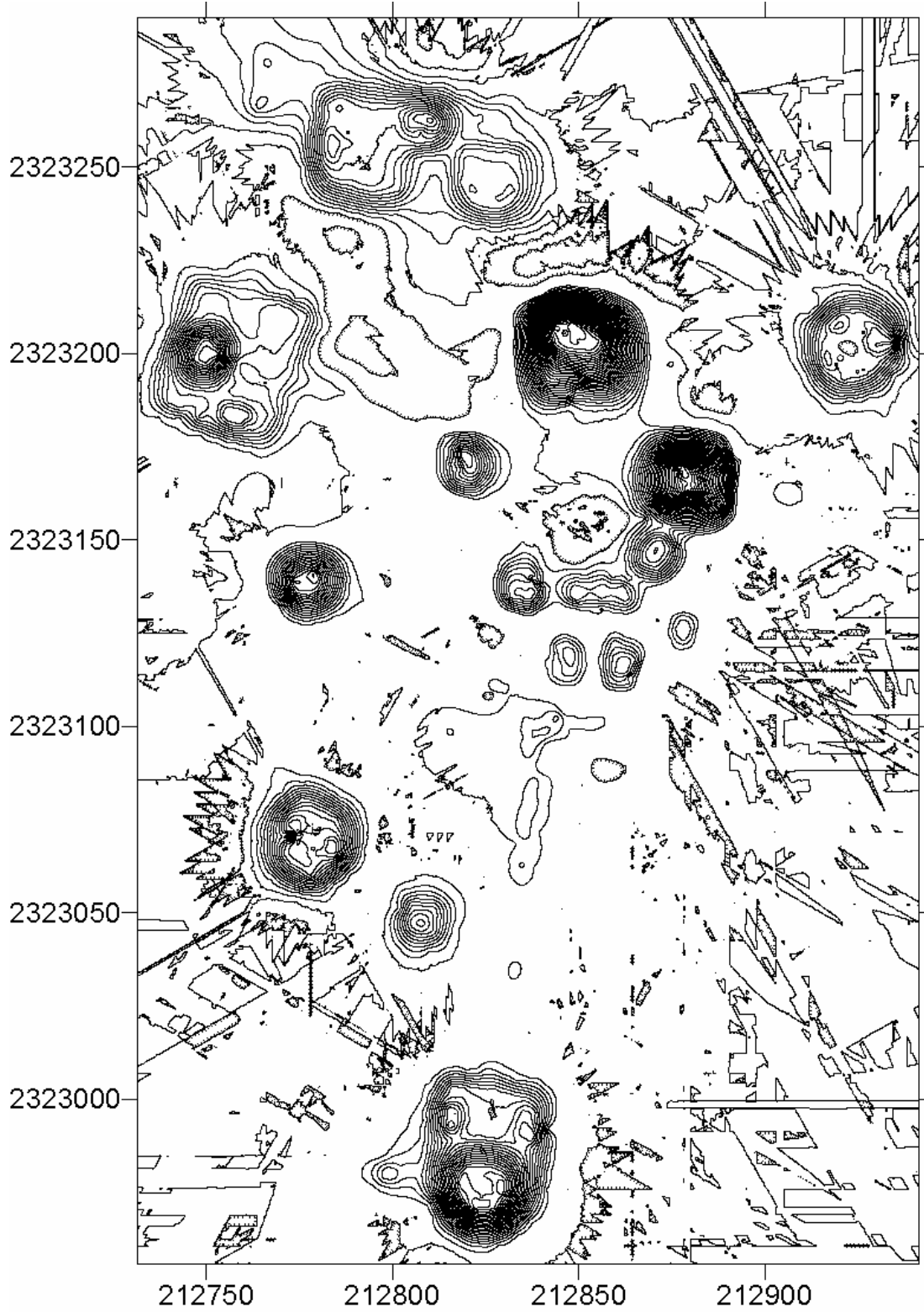
## **Conclusions**

There is much still to do at Xtobo, and the interpretations offered here will inevitably change as we learn more, yet the site will always remain the wonder that she is. There are few sites in the world that are so old, and yet so untouched by the ravages of time. We stand to learn much about the Middle Preclassic from future work at Xtobo. Yet PAX is only one project among several that continue to radically change our perspective on the Middle Preclassic of northwest Yucatán. Just five years ago our knowledge of the Preclassic in the region was almost exclusively limited to the site of Komchén (Ringle and Andrews V 1990), and the Mirador group of Dzibilchaltun (Andrews IV and Andrews V 1980). Today well over 100 sites are known (Ligorred P. 2005; Peraza et al. 2002; Robles C. 2004; Robles C. and Andrews 2003), and new developments are occurring on a regular basis. It will take many years for the impact of these findings to be assimilated by Mesoamericanists, but in the end we will have a very different picture of Middle Preclassic Mesoamerica.

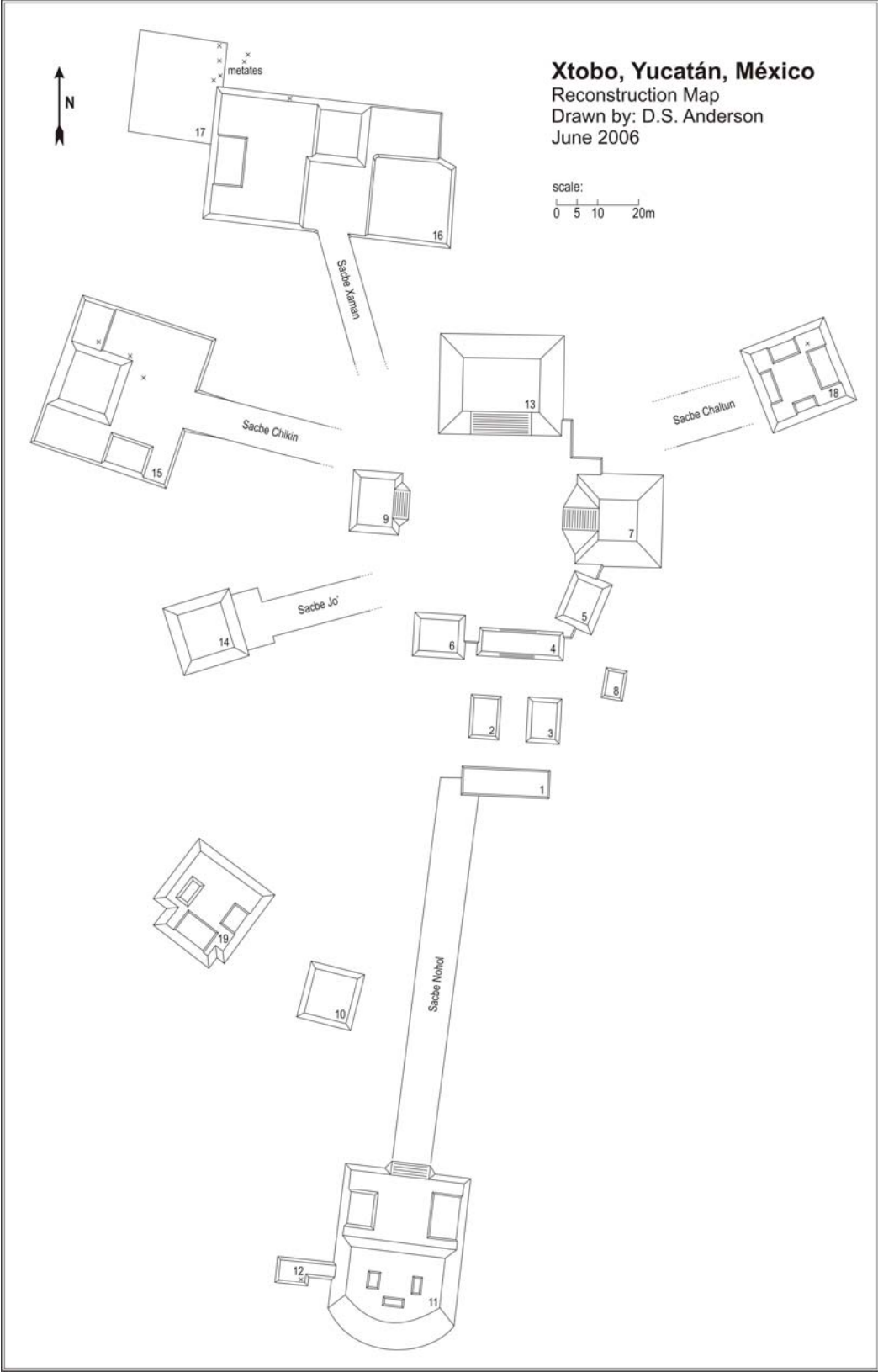
## **Acknowledgements**

The work carried out this season would not have been possible without the generosity in equipment, personnel, and advice of the directors of Proyecto Pakbeh, Bruce H. Dahlin and Scott R. Hutson. Fernando Robles Castellanos and Josep Ligorred Perramon offered immense assistance with permits for the project, as well as with arranging for workers to aid in clearing the site. Esteban de Vicente Chab offered much of his time freely to the project despite the little time Ajaw allows him. Edgar Medina Castillo offered his ever enthusiastic support for both the archaeology and adapting me to life in Mérida. Also much thanks to the sweat freely given by those who aided me in the field this season: Emily Walsh, Dylan J. Clark, Luis Fernando Aavedo Canche, and Luis Antonio Pavón Barrera. In addition none of this would have been possible without the hard work of the field crew from Ucu: Arseño Pech Noh, Enrique Pech Garcia, Rojelio Luna Magaña, and Miguel Andres Tzol Valdez. This project was very generously financially supported by the Middle American Research Institute of Tulane University, New Orleans.

**Figures**



**Figure 1.** Current topographic map of Xtobo.



**Figure 2.** The reconstruction map of Xtobo.

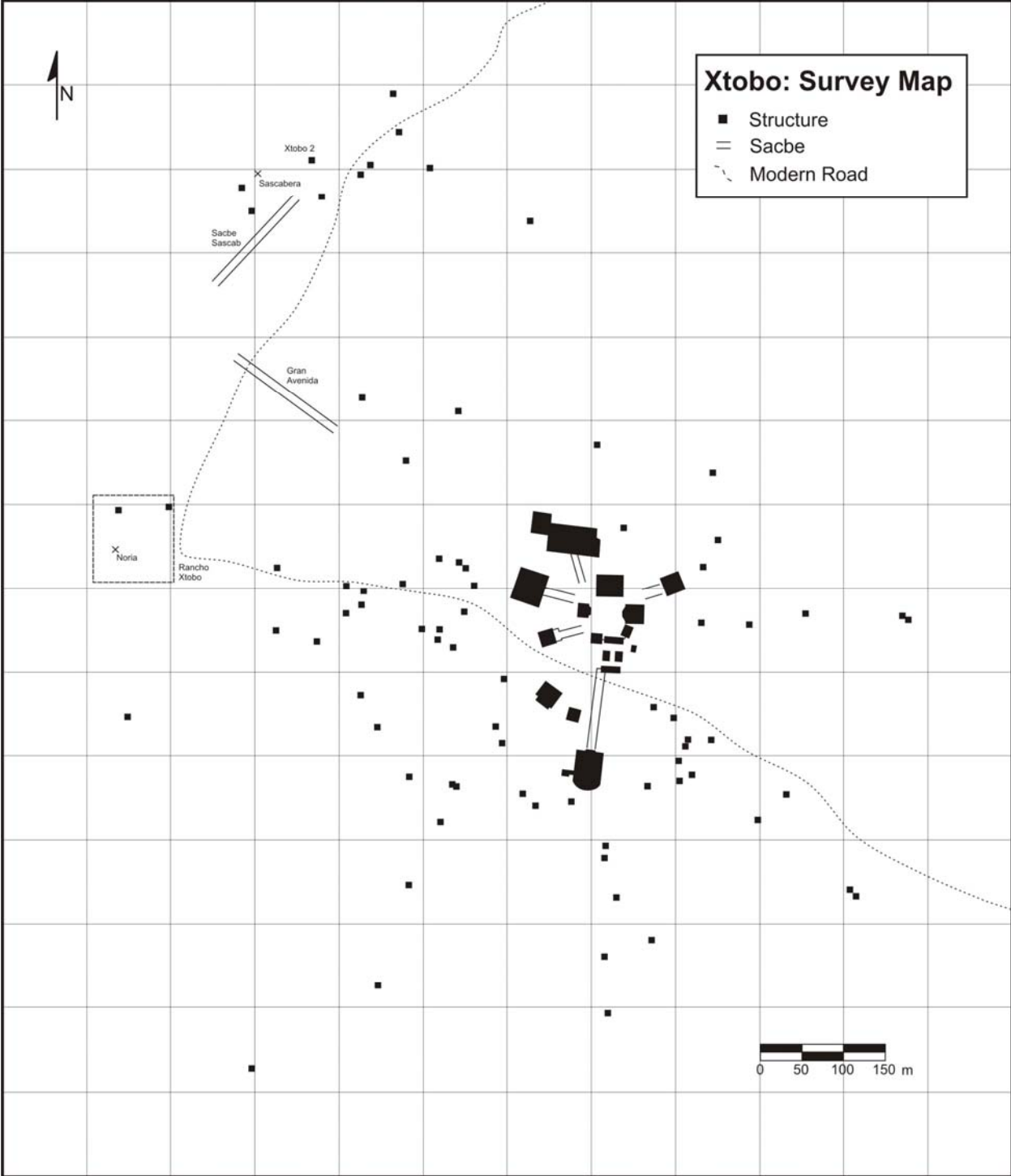


Figure 3. Survey map of Xtobo, showing all known architectural features.

## Tables

**Table 1.** Example of the coordinates recorded in order to draw the topographic map of Xtobo (A full list can be found in Appendix 1).

Point	OP	Site Based Coordinates:			UTM Coordinates:			Description
		Northing	Easting	Elevation	Northing	Easting	Elevation	
1		1000.00	1000.00	100.00	2323097.89	212826.11	10.00	Station 1
R-01	1	991.08	1017.34	99.66	2323088.97	212843.44	9.66	Road
R-02	1	989.53	1015.85	99.69	2323087.42	212841.96	9.69	Road
R-03	1	994.28	1003.08	99.89	2323092.17	212829.19	9.89	Road
R-04	1	996.11	1003.89	99.84	2323094.01	212829.99	9.84	Road
R-05	1	1002.20	990.24	99.96	2323100.09	212816.35	9.96	Road
R-06	1	1001.14	989.06	100.02	2323099.04	212815.16	10.02	Road
51	1	1011.90	1026.44	99.41	2323109.80	212852.55	9.41	Ballcourt Station (51)
1-01	51	1005.34	1036.49	99.14	2323103.23	212862.59	9.14	Str 1
1-02	51	1003.82	1035.98	99.54	2323101.71	212862.08	9.54	Str 1
1-03	51	1000.09	1037.23	99.58	2323097.98	212863.34	9.58	Str 1
1-04	51	1001.48	1041.12	99.21	2323099.37	212867.22	9.21	Str 1
1-05	51	997.87	1036.04	99.48	2323095.76	212862.14	9.48	Str 1
1-06	51	994.82	1036.84	99.09	2323092.71	212862.95	9.09	Str 1
1-07	51	994.00	1028.33	99.04	2323091.90	212854.44	9.04	Str 1
T-1	51	990.30	1030.60	98.80	2323088.19	212856.70	8.80	Topo
R-08	51	984.61	1032.70	99.19	2323082.50	212858.80	9.19	Road
R-09	51	982.15	1033.13	99.30	2323080.04	212859.24	9.30	Road
1-08	51	996.55	1028.57	99.48	2323094.44	212854.68	9.48	Str 1
1-09	51	1000.45	1027.47	99.70	2323098.34	212853.58	9.70	Str 1

**Table 2.** UTM coordinates recorded for the base mapping station at Xtobo.

Date	UTM Cord. (16Q BU, WGS 84)		Avg. UTM Cord.	
20-Jun	212830	2323094	212830.00	2323094.00
20-Jun	212826	2323097	212828.00	2323095.50
20-Jun	212827	2323096	212827.67	2323095.67
22-Jun	212834	2323099	212829.25	2323096.50
23-Jun	212824	2323100	212828.20	2323097.20
23-Jun	212826	2323103	212827.83	2323098.17
19-Jul	212825	2323094	212827.43	2323097.57
19-Jul	212828	2323099	212827.50	2323097.75
19-Jul	212824	2323099	212827.11	2323097.89
19-Jul	212827	2323098	212827.10	2323097.90
20-Jul	212825	2323099	212826.91	2323098.00
20-Jul	212826	2323099	212826.83	2323098.08
20-Jul	212824	2323096	212826.62	2323097.92
20-Jul	212825	2323098	212826.50	2323097.93
20-Jul	212824	2323095	212826.33	2323097.73
20-Jul	212823	2323100	212826.13	2323097.88
24-Jul	212826	2323097	212826.12	2323097.82
24-Jul	212824	2323099	212826.00	2323097.89
24-Jul	212828	2323098	212826.11	2323097.89

**Table 3.** Identifications to the group level in the type-variety system of all pottery sherds collected at Xtobo. Analysis carried out by Fernando Robles Castellanos and Teresa Ceballos Gallatreta.

PERIODO CULTURAL	HORIZONTE CERÁMICO	GRUPO CERÁMICO	XTOBÓ															Superficie CY-166	Total				
			Pozo 1-I CY-166-1-1	Pozo 1-II CY-166-1-2	Pozo 2-I CY-166-2-1	Pozo 2-II CY-166-2-2	Pozo 3-I CY-166-3-1	Pozo 3-I-b CY-166-3-1b	Pozo 3-II CY-166-3-2	Pozo 3-III CY-166-3-3	Plza Centr CY-166-0-1	Estr. 11 CY-166-0-11	Estr. 12 CY-166-0-12	Estr.15 CY-166-0-15	Estr. 16 CY-166-0-16	Estr.17 CY-166-0-17	Estr. 18 CY-166-0-18			G. Xamán CY-166-0-2			
<b>Postclásico</b>	Táses (1100-1532)	Nabulá																					
		Mama																					
		Kukulá																					
		Muna																				2	2
		Ticul																				1	1
<b>Clásico Tardío y Terminal</b>	Cehpech (550-1100)	Teabo																			10	10	
		Ich Cansihó																					
		Chum																					
		Chuburná																					
		Chablekal																					
<b>Clásico Temprano</b>	Cochuah (250-550)	Batres																					
		Oxil															1				1		
		Maxcanú												1				1		12	14		
		Aguila																		3	3		
		Timucuy	1														1			2	4		
<b>Preclásico Tardío</b>	Nabanché tardío (400 aC-250 dC)	Shangurro	1																1	2			
		Xanabá	2												3				3	8			
		Sierra																		1	1		
		Polvero																					
		Saban							4			1		1		3				9			
<b>Preclásico Medio</b>	Nabanché Temprano (800/700-400 aC)	Tipikal/Unto			3	3		3		1				1		1		15	27				
		Ucú	3			1	6	5			1				1			2	19				
		Dzudzuquil	1		6		8	28			2	7		1	1	2	10	1	30	97			
		Muxanal	1																				
		Joventud	1	1	6	2	4	9	1	1	5	2	2	2	2	13	3	1	25	80			
		No identificados																9	9				
		No identificables		9													3	40	52				
		<b>Total</b>	9	1	24	6	18	49	1	4	14	2	4	8	6	27	5	5	156	339			

**Table 4.** Architectural features recorded in the 2005 survey work.

Survey No.	UTM Cord. (16Q BU, WGS 84)		Structure Type	Predominate Material	Construction Technique	Height	Levels	Access	Metates	Soil
S-106	212668	2323409	Basal platform	Large stone	Simple alignment	Low	1	Unknown	0	Box Lu'um
S-107	212263	2323292	Platform with structure	Large stone	Retaining wall	Medium	2	Unknown	0	Box Lu'um
S-108	212610	2322973	Basal platform	Large stone	Simple alignment	Low	1	Unknown	0	Box Lu'um
S-109	212572	2323032	Platform with structure	Large stone	Simple alignment	Low	2	Unknown	0	Box Lu'um
S-110	212552	2323070	Basal platform	Large stone	Simple alignment	Low	1	Unknown	0	Box Lu'um
S-111	212500	2323134	Basal platform	Large stone	Simple alignment	Low	1	Unknown	0	Box Lu'um
S-112	212451	2323147	Basal platform	Large stone	Simple alignment	Low	1	Unknown	0	Box Lu'um
S-113	212893	2322962	Basal platform	Large stone	Simple alignment	Low	1	Unknown	1	Box Lu'um
S-114	212931	2322968	Platform with structure	Large stone	Simple alignment	Low	2	Unknown	2	Box Lu'um
S-115	212938	2323009	Basal platform	Large stone	Simple alignment	Low	1	Unknown	0	Box Lu'um
S-116	212924	2323043	Basal platform	Large stone	Retaining wall	Medium	1	Unknown	0	Box Lu'um
S-117	212865	2323270	Platform with structure	Worked stone	Retaining wall	Low	2	Unknown	1	Box Lu'um

## **Appendices**

The appendices to this report are made available separately due to their length, and general mundanity. They can be acquired directly from the author (danders3@tulane.edu), or from his website (<http://studentweb.tulane.edu/~danders3>).

**Appendix 1.** The Coordinates recorded in order to draw the topographic map of Xtobo.

**Appendix 2.** Surveyed structures database, contains basic information on all known structures at Xtobo, which are not included in the map.

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